



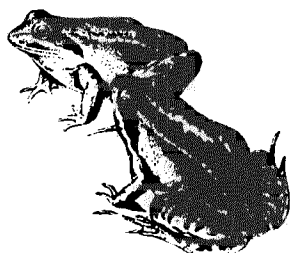
## **The Wave is Still Building**

*Rich Leopold – IOWATER Coordinator*

The second full season of IOWATER workshops have been completed, and the staff are contentedly breathing a sigh of relief. When we originally planned the 2001 season's workshops last winter, we thought the initial "rush" of attendees happened in the 2000 season and this season would not have as many participants as the first year.

We thought wrong! In the year 2000, IOWATER held 18 Level One workshops training over 500 citizen monitors. This year, although we had initially planned only 12 Level One workshops, we held a total of 21 and doubled the number of trained citizen monitors from our first year!

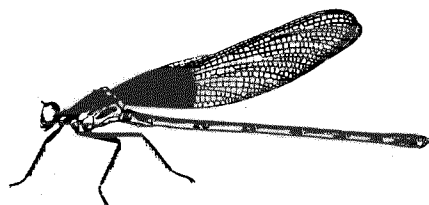
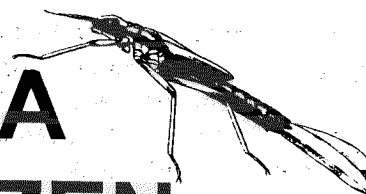
The new IOWATER Level Two workshops and modules were also very successful, with a total of 888 participants taking the trainings in one or more of 15 offered workshops. If you do the math, and that's a total of 36 IOWATER workshops this season!



# **THE IOWA CITIZEN MONITOR**

VOLUME 2, NO. 4

Fall 2001



Obviously, this type of effort has taken place only because of a large cast of highly motivated, competent, and passionate staff and volunteers. Here now was the cast of the **"2001 IOWATER Watershed Tour"**

Jacklyn Gautsch – As the new Field Coordinator for the IOWATER program, Jackie needed to hit the ground running. Jackie coordinated the training for most of the Level One workshops, processed registrations for all of this season's workshops, and still managed to have time to represent IOWATER at many functions. Her enthusiasm and expertise have been a great asset to IOWATER!

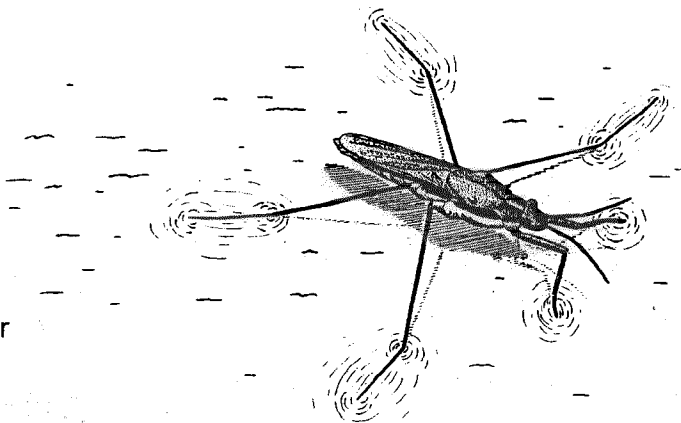
Lynette Seigley – We joke that Lynette has many full-time titles but only one paycheck! In addition to her duties as a research geologist, Lynette provides IOWATER with a vital scientific base on database management and as IOWATER's Quality Assurance / Quality Control officer. This is in addition to her training at most IOWATER workshops in mapping techniques, data submission, and field chemical/physical assessment training.

Erika McCroskey and Kathy Moline – Every sustained effort needs support staff, those invaluable people in the background handing out materials, helping to set-up and teardown, and assisting in whatever way is needed. It was here that you would often see either Kathy or Erika's smiling faces. Their contribution to IOWATER through their AmeriCorps service will be felt long after their tenure is complete.

Pat Boddy and Kim Shelquist – Again this season, Pat and Kim of the Boddy Media group presented at IOWATER Level One workshops. And again also was their level of expertise in their "credibility and communications" sessions at IOWATER Level One trainings. Their commitment to monitors even after the workshop is a testament to their contributing "over and above the call of duty".

There are many others. These include the contact facilitators who locally processed registrations, the IOWATER trainers who assisted in the Level One workshops, Mary Skopec (Water Monitoring Section Supervisor) who continues with her full support of the program (and even helped at many trainings!), Joost Korpel and the rest of the staff at the Geological Survey Bureau in Iowa City who make our website and database one of envy nationwide, and many others. To all of these and to all those who helped that I didn't mention, thank you!

And most importantly, to the over 1,000 citizens of Iowa who have stepped forward, giving freely of their time and resources, giving a strong voice of support to protecting our natural resources for us and our future generations – my respect. I've said it often at workshops and I'll reiterate it here, without you doing what you are doing, we could not do what we do. **You give us the hope – Thank You!**



### ODE TO A STREAM MONITOR

*I kick the riffle with hope to see,  
The wondrous Hydropsychidae.  
With ventral gills and forelegs three;  
I curse the heavens should there not be.*

*But wait! Upon the seine I spy:  
My quest, for 'tis a caddisfly!*

*The riffle explodes as I hope and pray,  
To find a Syphonuridae.  
Tails are three, but claws are one;  
I question my faith should I find none.*

*Gadzooks! Do I believe my eyes?  
Upon the net, two huge mayflies!*

*My angst-driven legs begin to feel weak,  
"Plecoptera!" I shout, "It is you I must seek!"*

*Body of armor, displaying two claws;  
I offer my soul for a stream without flaws.*

*Huzzah! Could it be?? An illusion?? Oh my!*

*'Tis not! For I see the seductive stonefly!*

*I fall to my knees, I crawl to the net.  
My face fills with glee; I don't care that I'm wet.*

*There's crayfish and beetles, a sowbug, a midge;  
a disgusting black crane fly, as large as a bridge.*

*I fill up my sample, relaxed and relieved;  
For biodiversity has been achieved*

By Jonathan Pearson, 1994 (Written for the MD SOS Volunteer Monitoring Program)  
Contributed by Christopher M. Riggert,  
Conservation Research Center, Missouri  
Department of Conservation.

# Streams Vital in Removing Water Pollution

Reuters, April 5  
By Eric Beech

WASHINGTON (Reuters) - Streams play a bigger role than previously thought in removing pollutants before they get to larger waterways, scrubbing as much as half of the excess nitrogen from fertilizer runoff and auto emissions, scientists said on Thursday.

A nationwide study of 12 streams found that the smaller the stream -- with its shallow depth and high surface-to-volume ratio -- the more quickly nitrogen was removed, scientists said in the latest edition of the journal *Science*.

Previously, experts studying pollution focused on larger bodies of water rather than small streams, considering them more like gutters that simply carried nitrogen to lakes, rivers and oceans.

Excess nitrogen can cause ecologically damaging effects in large waterways, including algal blooms, which can kill fish and other aquatic animals.

Bruce Peterson of the Marine Biological Laboratory in Woods Hole, Massachusetts, one of the study's 15 co-authors, said the finding could have important implications for land-use policies. He said human efforts to control streams by covering or channeling them have made them less effective at nitrogen removal.

Streams remove nitrogen by providing a habitat for nitrogen-absorbing organisms and by releasing nitrogen from the water into the atmosphere.

"Small tributary streams in our watersheds, the ones most likely to be plowed under or buried in culverts or destroyed by human activity, have a very important role to play in removing nitrogen from water," Peterson said.

"If we restored and took care of all the small streams on the landscape, our water quality coming down rivers would be greatly improved," he said.

The scientists studied streams in Alaska, Arizona, Kansas, Minnesota, Michigan, New Hampshire, New Mexico, North Carolina, Ohio, Oregon, Puerto Rico and Tennessee.

They dripped trace amounts of ammonium -- a form of nitrogen -- into the streams and measured how much of it was absorbed by plants and animals and how much stayed in the water and was washed downstream. The researchers sampled water, algae and other plant life, bacteria, fungi and insects for six weeks at each site.

(submitted to *IOWATER* by Susan Heathcote, Research Director, Iowa Environmental Council)



# A Trip to the Other Side

**Jacklyn Gautsch**  
**IOWATER Field Coordinator**

As I round the final corner of my first training season, I am proud to see all the biological assessment logs entered into the database. Hopefully each sampling is not only a learning opportunity but also an enjoyable experience, for I know how fun it is to look at the critters (sorry Rich, even as a biologist I still like the word!)

Now that I know IOWATER citizen monitors are out there, I thought I would check on our state's professional monitors. Since 1994, the Iowa Department of Natural Resources (IDNR) and the University of Iowa Hygienic Laboratory (UHL) have sampled fish and benthic macroinvertebrates to assess the biological integrity of Iowa's streams and rivers. I decided to go on a "trip to the other side" to observe their methods.

Tom Wilton, Ken Krier and Jamie Mootz, (IDNR environmental specialists) and Jason Veldboom (limnologist with UHL), agreed to let me tag along on one of their biological sampling trips. We started out in Des Moines on a Monday morning at 7 a.m. The truck and trailer loaded up with all our equipment, five of us jumped in and begin the long ride to Dubuque. Along the way I am left to think about how outnumbered I am, being the only woman on the sampling team. I'm confident I will keep up.

We arrive at our first site at Dubuque County Conservation Board's Swiss Valley Park to sample Catfish Creek. To access the site we do a little "off-roadin'" and then hike our equipment the rest of

the way to the stream. We set up by putting nets across the stream at the beginning and the end of our sampling reach. Water quality data and flow measurements are collected.

Our first assessment is of the benthic macroinvertebrate population. Two types of samples are collected: multi-habitat and standard habitat. The first involves three people at a section of the sampling reach, collecting bugs in as many types of microhabitats as possible. Each person is given a sieve, a jar, and forceps and spends thirty minutes collecting. The standard habitat sample uses a Hess sampler, a round metal frame in the shape of a bucket. Water flows through one end and another net to collect the critters is on the other end. The bucket is placed in a ripple over rocks on the streambed. Each rock is picked clean of critters, repeating this procedure in three times. The bugs will be later identified and catalogued by UHL staff in the lab.

Now the real fun stuff: fish and electricity! We shock our sampling reach using backpack electro-shockers. Two people wield the electricity, working their way upstream, and the rest of us follow and net up fish left behind in the their wake. After we reach our upstream net we turn the electricity off and sit down along the bank to identify each fish. This is hard stuff, but with a little refresher course from Jamie I am ready to call out the identity of the fish in my net. After they are tallied up we let them go and move on to our last assessment.

At each site, a stream habitat assessment is done. Our sampling completed, we pull in our nets and put our equipment back in the trailer. Packed into the truck, we head to our hotel to rest up for the next day's sampling. I've kept up to the challenge, and have learned a lot from my "trip to the other side!"

# IOWATER Watershed Tour 2001 – The Numbers

(All number current as of 10/22/01)

## Level One Workshops

Date	Location	Number Trained
April 25- 26	Guthrie Center	46
May 4- 5	Montezuma	31
June 5- 6	Rock Rapids	7
June 8- 9	Missouri Valley	11
June 15- 16	Center Junction	33
June 22- 23	Earlham	31
June 29- 30	Clarinda	8
July 12- 13	Manchester	33
July 17- 18	Marshalltown	30
July 20- 21	Storm Lake	18
July 25- 26	Waukon	36
August 7- 8	Mason City	34
August 15- 16	Denison	18
August 17- 18	DeWitt	31
August 22- 23	Webster City	32
September 7- 8	Manning	20
September 7- 8	Mt. Vernon	31
September 21- 22	Cedar Falls	39
October 1-2	Des Moines	22
October 9, 10	Des Moines	34
October 12-13	Indianola	23

Total Number of Level One Monitors trained this summer: 568

Total IOWATER Level One Monitors: 1058

Total number of times staff have locked their keys in the car: 1

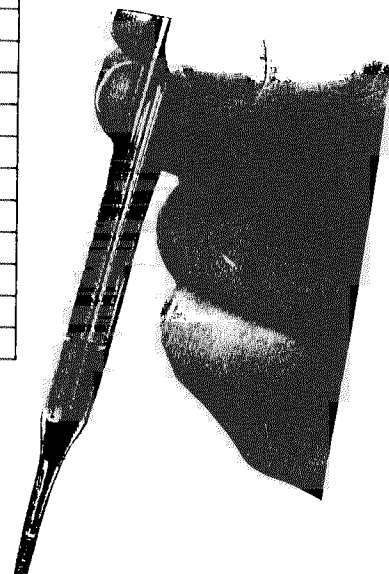
Total number of miles driven by IOWATER staff this summer: >4000

Total number of times a trainer has put their car in the ditch: 1

Total number of sites registered: 705

Total number of datasets submitted: 2796

Total number of friends made this summer: 1058



## Level Two Workshops

Number of Level Two Basic Training participants: 117 (4 workshops)

Number of Benthic Macroinvertebrate Indexing Module participants: 77 (4 workshops)

Number of Soils Module participants: 54 (3 workshops)

Number of Standing Waters Module participants: 103 (4 workshops)

Total number of certified Level Two Monitors: 95

\*"certified" implies Level Two Basic Training plus at least one module

**Total number of IOWATER workshops for Year 2001: 36**

**Total number of IOWATER workshops participants Year 2001: 919**

I want to thank everyone who helped out at the trainings and everyone that came to trainings, it has been a wonderful summer!! Jacklyn Gautsch - IOWATER Field Coordinator

Thanks to all the experts in their respective fields for helping at the Level Two trainings, including University Hygienic Laboratory limnology staff and soil scientists from the Natural Resources Conservation Service. Special thanks to all the participants, we are together taking caring and commitment to the next level! Rich Leopold – IOWATER Coordinator

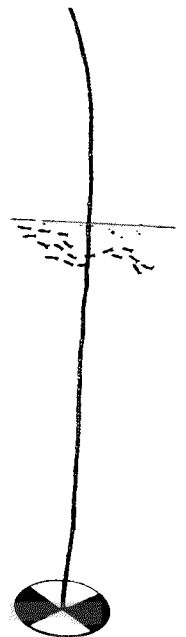
# IOWATER

## *Action!*

### Monitors in the Water

It's been a busy summer! Here were some events and/or press releases organized by IOWATER monitors:

- Jones County / Scotch Grove – with an article in the Cedar Rapids Gazette featuring Paul Rohrbacher.
- Winneshiek County – thanks to Ron and Patty Fairchild and the Decorah Middle School Team of Hannah Hagen-Atwell, Katie Haller, and Marguerite Moeller. This team brought IOWATER national attention through their "Nitrates: Students Care" project for the Bayer / National Science Foundation Awards national competition Orlando, Florida.
- Boone County – thanks to Barbara Krumhardt for a water-monitoring event at Ledges State Park.
- Story County – thanks to Von Kaster in a letter in the *Ames Daily Tribune* concerning IOWATER bacteria testing.
- Harrison County – thanks to Pam Cates of the Harrison CCB for beginning to form the Harrison County Stream Team.
- Jackson County – thanks to Margo Sprenger and her Maquoketa Middle School class water-monitoring.
- Story County – thanks to Mike Meetz and Jerry Keys for taking part in an article in the *Ames Daily Tribune*
- Bremer County – thanks to Tammy Turner for an event on the Little Wapsi at North Woods Park.
- Cass County – thanks to Amy Gilroy for a water-monitoring event at Lake Anita State Park.
- Jackson County – thanks to John Rodecamp of ISU extension and the Maquoketa Headwaters Watershed Council for the article in the *Maquoketa Sentinel-Press*.
- Winneshiek County – thanks to Andrew Peter and Michelle Harried for an article in the *Decorah Journal*.
- Statewide – thanks to John Creswell, ISU Extension Coordinator (Nutrient Management Education Project), for a feature article released for print and audio media.
- Pottawattame County – thanks to Diane Forristall for a letter in the *Iowa Farmer Today*.
- Linn County – thanks to David Osterberg and Kevin Woods for a follow-up article of an IOWATER training in the *Mount Vernon Sun*.
- Worth County – thanks to the County Conservation Board for a write-up in their *Manly Signal* column
- Mitchell County – thanks to Dale Adams and St. Ansgar FFA advisor Rick Jacobsen for the Turtle Creek water- monitoring project.
- Wapsi River Water Monitors - thanks to Jeremy Viles for coordinating monitoring events on the Wapsipinicon River and the participants Vicki Wilson, Dawn Woods, Angela Schmitt, Sue Bracht, Dennis Weepie, and others.



**iowater.net**



# Net Notes

**Lynette Seigley – Research Geologist**

**Data Submission.** Please remember to use Internet Explorer version 5.01 or 6.0 to submit data. This can be downloaded from the following site:

<http://www.microsoft.com/windows/ie/download/ie501sp2.htm>. Avoid using version 5.5 of Internet Explorer. If you are a Netscape user and you have Windows 98 or NT2000, do the following: go to Open My Computer; Select View; Toolbars; Address Bar; Type **www.iowater.net** into the address line. This will get you into Internet Explorer.

**Attention Apple or MAC users.**

Several Apple and MAC users were experiencing problems entering data. We've made modifications and you should now be able to enter your data.

**IOWATER map server back online.**

Thanks to Joost Korpel, the map of IOWATER sites is available again. Hardware problems resulted in the map being unavailable for a few weeks.

**Update on Sites Registered/Data Submitted.**

As of October 15, 705 sites in 77 counties have been registered in the IOWATER database. A total of 652 biological, 1,587 chemical/physical, 501 habitat, and 117 photographic records have been submitted.

**Need to correct data you submitted?**

If you realize after submitting your data that there is an error, contact Lynette to correct your information.

If you have questions or need help using the IOWATER database, contact Lynette Seigley at (319)335-1598 or [lseigley@iqsb.uiowa.edu](mailto:lseigley@iqsb.uiowa.edu). We welcome any suggestions or comments you have for improving the database.

**Was I successful in uploading data to the database?** Several people have commented that they had entered their data into the database but it did not appear. Here's an easy way to check. Make sure you are using Internet Explorer to submit your data. After confirming your data on the Confirmation page, hit Final Submit. At that time the following page should appear. If this page does not appear, your data did not get uploaded (contact Lynette for further instructions). Click on the site number and site name to view your data.

**IOWATER**  
Volunteer Water Quality Monitoring

Thank you for your Biological data entry

*Click on site below to open current record window for viewing.*  
**952005 - Ralston Creek (Sheridan Ave.)**

[Return to Data Entry Options](#)

<a href="#">Return to IOWATER Home Page</a>	<a href="#">View Data On-Line</a>	<a href="#">Submit Data On-Line</a>	<a href="#">Register a New Monitoring Site</a>
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# **1<sup>st</sup> Annual Volunteers in Natural Resources Conference**

## **November 16-17, 2001 Hotel Fort Des Moines**

### **Des Moines, Iowa**

#### Friday

- 4 – 6 p.m.**                      **Check-in and Munchies**
- 6 p.m.**                         **Evening Keynote, Gulf Hypoxia: The flux of nutrients from the Mississippi River Basin to the Gulf of Mexico – Richard Coupe, United States Geological Survey (Mississippi)**  
**“Open Space”** Do you wish YOU could set the agenda? Here’s your chance!
- 8:30 p.m.**                      **Concert: Carter and Connelley – A must see! This energetic and insightful duo tackle environmental concerns through their music.**

#### Saturday

- 9 a.m.**                         **Welcome and Address – Paul Johnson**
- 10:30 a.m.**                      **Concurrent Sessions A, B, C and D**  
**A. The Impact of Our Decisions**  
**B. The Clean Water Act at Work in Iowa**  
**C. Plant a Prairie, Build a Wetland—Funding Sources for Conservation Practices in Iowa**  
**D. Identifying Critical Volunteer Projects: What on Earth Can YOU Do?**
- 12 noon**                         **Lunch - Volunteer Awards (*meal provided*)**
- 1:30 p.m.**                         **Concurrent Sessions E, F, G and H**  
**E. Real Work and Recreational Activity: The Value of Stewardship and Service**  
**F. Laying a Foundation: Professional Water Quality Monitoring in Iowa**  
**G. Natural Resources Policy: How to Affect REAL Change and Gain Support**  
**H. IOWATER Rap: Success Stories and Challenges Ahead**
- 3 p.m.**                         **Concurrent Sessions I, J, K and L**  
**I. The Real Super Heroes: Friends Groups**  
**J. Looking Ahead: Natural Resources Legislation and Appropriation Forecast 2002**  
**K. Iowa Water Quality Experts, “Lightly Grilled”**  
**L. Lake Monitoring in Iowa**
- 4:30 p.m.**                         **Closing Remarks**

**"ORGANIZATION DOESN'T REALLY ACCOMPLISH ANYTHING.  
PLANS DON'T ACCOMPLISH ANYTHING EITHER.  
THEORIES OF MANAGEMENT DON'T MUCH MATTER.  
ENDEAVORS SUCCEED OR FAIL BECAUSE OF THE  
PEOPLE INVOLVED. ONLY BY ATTRACTING THE  
BEST PEOPLE WILL YOU ACCOMPLISH GREAT DEEDS."**

**General Colin Powell**



# 1<sup>st</sup> Annual Volunteers in Natural Resources Conference Registration Form

*(Please Print)*

Name (for nametag): \_\_\_\_\_

Organization/Affiliation: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/ZIP: \_\_\_\_\_

Work Phone: ( ) \_\_\_\_\_ Home Phone: ( ) \_\_\_\_\_

E-mail: \_\_\_\_\_

Fax: ( ) \_\_\_\_\_

Will you be eating a vegetarian lunch instead of a meat dish on Saturday?

(Please circle one.)

Yes

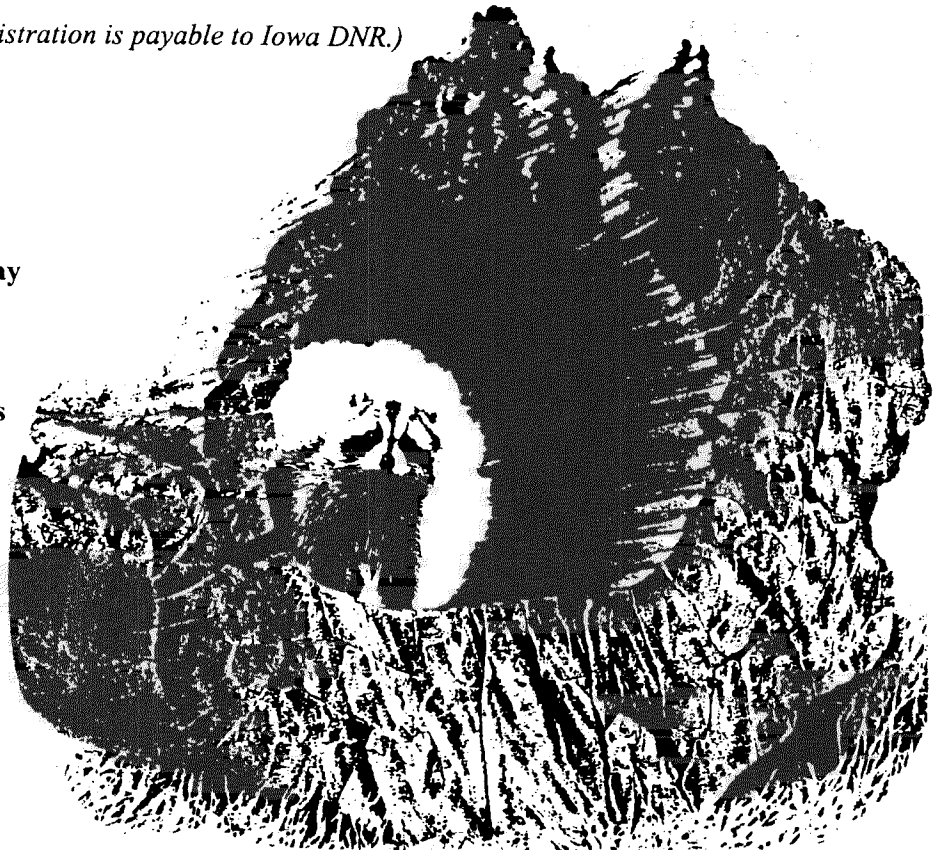
No

Please return registration form and fee to: Stefanie Forret, Iowa DNR  
502 E. 9<sup>th</sup> Street  
Des Moines, Iowa 50319-0034

*(Check for \$25 for conference registration is payable to Iowa DNR.)*

Your \$25 fee includes:

- Hors d' oeuvres on Friday
- Carter and Connelley concert on Friday
- Saturday luncheon
- Snacks and refreshments
- Free pass to the conference sessions of your choice!



IOWATER  
Iowa Dept. of Natural Resources  
Wallace Office Building  
502 East 9<sup>th</sup> Street  
Des Moines, IA 50319  
[www.iowater.net](http://www.iowater.net)

